

SWINE HEALTH

Title: Optimization of the PRRSV antibody ELISA for use in oral fluid-based surveillance –
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ABSTRACT

Already a proven technology in human diagnostic medicine, oral fluid-based testing could facilitate monitoring of disease in animal populations. Availability of disease data could provide for (1) cheaper methods of surveillance; (2) critically timed and targeted interventions; (3) "real time" evaluations of interventions; and (4) accurate estimates of the impact of specific pathogens on pig health and productivity. Therefore, the goal of this research was to provide pork producers an easy, cost-effective method to detect and monitor PRRSV circulation in swine populations using an antibody assay optimized and validated for oral fluid samples. The results of this experiment showed that a commercial PRRS ELISA could be optimized to detect anti-PRRSV antibody in oral fluid samples. Subsequent to this work, the manufacturer has developed a next generation assay reported to provide improved performance, e.g., fewer false positive results. The results of this study justify evaluation of the PRRS 3X ELISA for detection of anti-PRRSV antibody in oral fluids.

These research results were submitted in fulfillment of checkoff-funded research projects. This report is published directly as submitted by the project's principal investigator. This report has not been peer-reviewed.

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